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10/712,869	11/12/2003	Keiichi Iwamura	CFA 00018 US	8628

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Canon U.S.A. Inc.
Intellectual Property Department
15975 Alton Parkway
Irvine, CA 92618-3731

EXAMINER

NGUYEN, KHOI

ART UNIT	PAPER NUMBER
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2132

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/712,869

Applicant(s)

IWAMURA, KEIICHI

Examiner

Khoi Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/14/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-23 are pending and presenting for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 22 is rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

4. With regard to claim 22, the phrase "computer program " lacks support of a tangible medium, which leads to nonstatutory subject matter. The recited claim should be amended to embody in computer-readable media.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-14 and 18-23 are rejected under 35 USC 102(e) as being anticipated by Bisbee et al. (US Pat. No. 7162635), hereafter "Bisbee".

7. With regard to claims 1 and 18, Bisbee discloses an information processing apparatus for processing original data created by a predetermined author (Fig. 2; col. 1: line 38, DAS), the apparatus/method comprising:

storing means (col. 19: lines 44-46, database indicates storing means) for storing modification information regarding a modification when the original data is modified (Fig. 1A: item P7 – the inner P7; col 13: lines 46-53, document couples with digital signature and certificates indicates modification of the original data); and modification-assuring-information creating means for creating modification-assuring information for assuring that the modification information is true (col. 11: lines 39-42, digitally signed indicates modification-assuring-information creating means).

8. With regard to claims 2 and 19, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) and method further comprising determining means for determining whether the modification information is valid (col. 16: lines 25-28, using public key to verify TCU's digital signature indicates determining means for determining whether the modification information is valid), wherein, when the determining means determines that the modification

information is valid, the modification-assuring-information creating means creates the modification assuring information (col. 16: lines 35-40, new hash value indicates modification assuring information).

9. With regard to claim 3, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) further comprising original-data assuring-information creating means for storing original-data assuring information for assuring that the original data is an original (Fig. 3: item 304: "[electronic document][Digital signature]...." suggests that original-data assuring information for assuring that the original data is an original)
10. With regard to claim 4, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS), further comprising modification processing means for performing a modification process on the original data (Fig. 3: item 304: "[electronic document][Digital signature]...." ; col. 16: lines 18-20, appending transfer agent's signature indicates modification process on the original data).
11. With regard to claim 5, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS), wherein the modification assuring information and the original-data assuring information are digital signatures (Fig. 3A: item eLuvinated™ eOriginal™; Fig. 3: item 304: "[electronic document][Digital signature]...." Suggests digital signature is used for both assuring information).

12. With regard to claim 6, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS), wherein the modification information includes information for identifying the original data (Fig. 4A; col. 17: lines 14-20, information for identifying the modification processing means (Fig. 4A: item TCU-DS01,02,03, and 04 indicate modification processing means; col. 17: lines 45-50), and information for identifying the modification process performed when the original data is modified (Fig. 4A; col. 18: lines 33-40).
13. With regard to claim 7, Bisbee discloses the information processing apparatus, wherein the modification information includes the original data and difference information between the original data and modified data with respect to the original data (Fig. 5A; col. 19: lines 18-20).
14. With regard to claim 8, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) wherein the determination by the determining means is performed using pre-set access permission (col. 16: lines 25-28, using public key to verify TCU's digital signature indicates pre-set access permission since only private key that associates with the public key can decrypt the TCU's digital signature)

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15. With regard to claim 9, Bisbee discloses the information processing apparatus, wherein the determination by the determining means is performed using a public key of the author of the original data (col. 16: lines 25-28).
16. With regard to claim 10, Bisbee discloses the information processing, further comprising managing means (col. 13: lines 58-60) for managing the original data (Fig. 3A: item information object; col. 13: lines 46-50), the original-data assuring information (Fig. 3A: item signer's digital), the modification information (Fig. 3A: item date-time stamp1) and the modification assuring information (Fig. 3A: TCU's digital signature).
17. With regard to claim 11, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) further comprising transmitting means for transmitting (col. 11: lines 42-45; col. 14: line 1) the original data, the original-data assuring information, the modification information, and the modification assuring information.
18. With regard to claim 12, Bisbee discloses an information processing apparatus for processing original data created by a predetermined author, the apparatus (Fig. 2; col. 1: line 38, DAS) comprising: original-data verifying means for verifying that the original data is assured as being an original (col. 16: lines 35-40); and modification-information verifying means for verifying that modification

information regarding a modification of the original data is assured as being true (Fig. 3A: item date-time stamp₂ and TCU's digital signature₂ indicates modification information of the original data and the digital signature assured as being true; col. 16: lines 51-53).

19. With regard to claim 13, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) further comprising modifying means for modifying the original data in accordance with the modification information (col. 21: lines 40-43, transformed into an e-original indicates modifying the original data) when it is verified that the original data is assured as being an original and the modification information is assured as being true (col. 22: lines 2-4, re-validation indicates original data is assured and modification is being true).
20. With regard to claim 14, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) wherein the original-data verifying means verifies a digital signature for the original data (col. 16: lines 25-28) and the modification-information verifying means verifies a digital signature for the modification information (col. 19: lines 65-67 and col. 20: lines 1-4, new e-originals and re-validate indicates modification-information and verifies a digital signature respectively).

21. With regard to claim 20, Bisbee discloses an information processing method for processing original data created by a predetermined author (Fig. 2; col. 1: line 38, DAS), the information processing method comprising: an original-data verifying step of verifying that the original data is assured as being an original (col. 16: lines 35-40); a modification-information verifying step of verifying that modification information regarding a modification of the original data is assured as being true (Fig. 3A: item date-time stamp₂ and TCU's digital signature₂ indicates modification information of the original data and the digital signature assured as being true; col. 16: lines 51-53); and a modifying step of modifying the original data in accordance with the modification information (col. 21: lines 40-43, transformed into an e-original indicates modifying the original data) when it is verified that the original data is assured as being an original and the modification information is assured as being true (col. 22: lines 2-4, re-validation indicates original data is assured and modification is being true)
22. With regard to claim 21, Bisbee discloses the information processing method (Fig. 2; col. 1: line 38, DAS) wherein a digital signature for the original data is verified in the original-data verifying step and a digital signature for the modification information is verified in the modification-information verifying step (Fig. 3A: item signer's digital certificate and TCU' digital certificate indicate₂ verification of digital signature for original and modification data).

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23. With regard to claim 22, Bisbee discloses a computer program that executes the information processing method (col. 28: lines 40-42).
24. With regard to claim 23, Bisbee discloses a storage medium that can be read by a computer and that stores the computer program (col. 20: lines 56-58).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claim 15-17 are rejected under 35 USC 103(a) as unpatentable over Bisbee and in view of Ginter et al. (US Pat No. 5982891), hereafter "Ginter"**

27. With regard to claim 15, Bisbee discloses the information processing apparatus (Fig. 2; col. 1: line 38, DAS) that manages (Fig. 3A: item information object; col. 13: lines 46-50) the original-data assuring information (Fig. 3A: item signer's digital), the modification information (Fig. 3A: item date-time stamp1) and the modification assuring information (Fig. 3A: TCU's digital signature) over a network (col. 11: lines 26, Internet indicates a network; col. 11: lines 44-45).

However, Bisbee does not disclose a server that is connected with the information processing apparatus over a network wherein the server receives and manages the original-data assuring information, the modification information and the modification assuring information.

Ginter, on the other hand discloses a server (col. 17: lines 60-63) that is connected with the information processing apparatus over a network wherein the server receives and manages the original-data assuring information, the modification information and the modification assuring information.

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Bisbee such that to incorporate a server that is connect with the information processing apparatus over a network, as taught by Ginter to provide a new kind of "virtual distribution environment" or VDE to secures, administers, and audits electronic information use that travel across the information highway (col. 2, lines 22-27).

28. With regard to claim 16, Bisbee discloses an electronic-data management system (Fig. 2; col. 1: line 38, DAS) comprising:
an information processing apparatus which is connected over a network (Fig. 2; col. 1: line 38, DAS; col. 11: lines 26, Internet indicates a network; col. 11: lines 44-45) each information processing apparatus comprising verifying means for

verifying (col. 1: lines 55-65) that electronic data that is shared over the network (Fig. 1A: item "Document" indicates electronic data) is assured as being an original (col. 16: lines 35-40) and for verifying (col. 33: lines 8-11) that first modification information regarding a modification of the electronic data (col. 33: lines 1-5, adding TCU's digital signature and certificate indicates modification to original data) is assured as being true (col. 33: lines 8-11);

electronic-data modifying means for modifying the electronic data (col. 33: lines 1-5, adding TCU's digital signature and certificate indicates electronic-data modification) when the verifying means verifies that the electronic data is assured as being an original and the first modification information is assured as being true;

information creating means for creating second modification information regarding a modification of the electronic data that is modified by the electronic-data modification means (col. 33: lines 45-48, by applying digital signature to copy of the original e-original indicate creating second modification using electronic data modification means discussed above) and for creating modification assuring information for assuring that the second modification information is true (col. 33: lines 54-57, generating a hash indicates assuring information is true) ; and

transmitting means for transmitting the second modification information and the modification assuring means over the network (col. 33: lines 56-57, submits the wrapper to TCU indicates transmitting the second modification information) and cooperates with each other to manage the electronic data (Fig. 8, Items "origination system", "EC", and "TCU" with record transfer and communication legends indicates cooperating among each other to manage the electronic data).

However, Bisbee does not disclose a plurality of information processing apparatuses which is connected over a network and transmitting means for transmitting the second modification information and the modification assuring means over the network, wherein the plurality of information processing apparatuses cooperates with each other to manage the electronic data

On the other hand, Ginter disclose a plurality of information processing apparatuses (col. 9: lines 46-49, Virtual Distribution Environment, hereafter "VDE" nodes indicates a plurality of information processing apparatuses) which is connected over a network and transmitting means for transmitting the second modification information and the modification assuring means over the network, wherein the plurality of information processing apparatuses (col. 9: lines 46-49, VDE nodes indicates a plurality of information processing apparatuses) cooperates with each other to manage the electronic data.

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Bisbee such that to incorporate a server that is connect with the information processing apparatus over a network, as taught by Ginter to provide a new kind of "virtual distribution environment" or VDE to secures, administers, and audits electronic information use that travel across the information highway (col. 2, lines 22-27).

29. With regard to claim 17, Bisbee discloses a copyright-product management system (col. 1: lines 37-39, DAS indicates copyright-product management) having a first information processing apparatus in the possession of an author of a primary copyright product (col. 31: lines 24-30) on a network (col. 11: lines 26, Internet indicates a network; col. 11: lines 44-45), the copyright-product management system comprising:
- primary-copyright-product distributing means (col. 11: lines 26, Internet indicates a network; col. 11: lines 44-45) for distributing the primary copyright product from the first information processing apparatus to a user which is authorized by the author (col. 26: lines 50-59, instructions/terms indicates authorized by the author), wherein the user makes a modification to the primary copyright product within a scope of permission granted by the author (col. 27: lines 1-7, accept the offer indicates modification);

transmitting means for transmitting (col. 28: lines 5-8), to the first information processing apparatus, modification information indicating content of the modification (col. 27: lines 7-11, communicating its acceptance indicates content of the modification) and first modification assuring information for assuring that the modification information is true (col. 27: lines 11-15), wherein the first information processing apparatus receives (col. 28: lines 5-7, the fact that TCU verifies the transfer of ownership from B to C and communicates the verification to both party indicates the first information process apparatus is receiving) the modification information and the first modification assuring information (col. 27: lines 54-63, changing ownership ($S_b(S_a(\text{object}))$) to ($S_c(S_a(\text{object}))$) and since S_c is a digital signature, they indicate the modification and first modification assuring information respectively) and verifies whether or not the received modification information is valid using the first modification assuring information (col. 34: lines 1-5, comparing the hash indicate verification using modification assuring information).

sending-back means for sending (col. 28: lines 5-8), when the received modification information is verified as being valid, the modification information along with second modification assuring information (col. 28: lines 24-25 $S_c(S_b(S'_{tcu}(S_b(S_a(\text{Object}))), \text{Cert}_c, \text{Qual}), \text{counter offer}), S_c(\dots, \text{Qual}), \text{counter offer}$ indicates modification and second modification assuring information), which assures that the received modification information is valid (col. 34: lines 1-5,

comparing the hash indicate verification using modification assuring information), back to the at least one information processing apparatus (col. 28: lines 5-8), wherein the at least one information processing apparatus that has received the modification information and the second modification assuring information is granted permission to use the modified primary copyright product as a secondary copyright product (col. 28: lines 24-25, Sc (...., Qual), is initially created by a – S_a (object) with the qualify position and after processing through business rules; it was being counter offer by C indicates permission granted to use the modified primary copyright product as a secondary copyright product).

However Bisbee does not disclose a plurality of second information processing apparatuses connected with the first information processing apparatus over a network and distributing the primary copyright product from the first information processing apparatus to at least one of the second information processing apparatuses.

Ginter, on the other hand discloses a plurality of second information processing apparatuses connected with the first information processing apparatus over a network (col. 9: lines 46-49, VDE nodes indicates a plurality of information processing apparatuses) and distributing the primary copyright product from the first information processing apparatus to at least one of the second information

processing apparatuses (col. 9: lines 46-49, VDE nodes indicates a plurality of information processing apparatuses)

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Bisbee such that to incorporate a server that is connect with the information processing apparatus over a network; as taught by Ginter to provide a new kind of "virtual distribution environment" or VDE to secures, administers, and audits electronic information use that travel across the information highway (col. 2, lines 22-27).

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US Pat. No. 6397332 to Kawano et al. (Discloses a verification method to generate a verification value whenever the data body is generated and the verification is held in a verification holding element and then updated).
- b. US Pat. No. 6333752 to Hasegawa et al. (Discloses an image processing with a parameter managing section for managing a plurality of parameter changes).

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- c. US Pat. No. 6895507 to Teppler (Discloses a system and method to date of data files which are accessed, created, modified, received, or transmitted).
- d. US Pat. No. 6671805 to Brown et al. (Discloses a method of digitally signing an electronic document with a plurality of signers).

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoi Nguyen whose telephone number is 570-270-1251.

The examiner can normally be reached on Mon-Fri (8:30 am – 5:00 pm est)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khoi Nguyen
Art Unit 2131
Date: 2/28/07



Benjamin E. Lerner
Examiner AU 2132